Patent Claims:

1. A process for the production of blocked polyurethane prepolymers comprising reacting

a) one or more diisocyanates or polyisocyanates with

b) one or more polyether polyols that have a content of unsaturated terminal groups of less than or equal to 0.02 meq/g of polyol, a polydispersity (PD = M_w/M_n) of 1.1 to 1.5, and/or an OH functionality of greater than or equal to 1.9,

which forms an NCO-functional polyurethane prepolymer, followed by blocking of the NCO groups; with

c) at least one hydrocarbon resin containing phenolic OH groups and/or an optionally substituted phenol.

2. Blocked polyurethane prepolymers obtained from the process according to claim 1.

3. Blocked polyurethane prepolymers according to claim 2, wherein the component a) is an aromatic polyisocyanate or a mixture of aromatic polyisocyanates.

4. Blocked polyurethane prepolymers according to claim 2 , wherein t the component b) is a polyether polyol with a polydispersity of 1.1 to 1.5 and an OH functionality of greater than 1.9 mg KOH/g.

5. Blocked polyurethane prepolymers according to claim 4, wherein the component b) has an OH functionality of greater than or equal to 1.95 mg KOH/g.

6. Blocked polyurethane prepolymers according to claim 2 , wherein the

component c) are hydrocarbon resins containing phenolic OH groups and with an hydroxyl group content of 0.1 wt.% to 10 wt.%.

7. Blocked polyurethane prepolymers according to claim 6, wherein the component c) are liquid hydrocarbon resins at room temperature with an hydroxyl group content of 2 wt.% to 8 wt.%. based on the prepolymers

8. A reactive systems comprising:

A) polyurethane prepolymers according to claim 2,

B) at least one organic amine containing at least two primary amino groups,

C) optionally compounds containing oxirane groups that on average contain more than one oxirane group per molecule, and

D) optionally catalysts and/or additives.

9. A method of making adhesives, sealing compositions, casting compositions, composites (fibre composite materials), moulded parts and coatings comprising mixing the blocked polyurethane prepolymers according to claim 2 into a solvent free reactive system.

10. A method of making anti-corrosive coatings for use in chalybeate water construction, ship building and for pipelines comprising mixing the blocked polyurethane prepolymers according to claim 2 into a solvent free reactive system.

11. Blocked polyurethane prepolymers according to claim 3, wherein the component c) are hydrocarbon resins containing phenolic OH groups and with an hydroxyl group content of 0.1 wt.% to 10 wt.%.

12. Blocked polyurethane prepolymers according to claim 4, wherein the component c) are hydrocarbon resins containing phenolic OH groups and with an hydroxyl group content of 0.1 wt.% to 10 wt.%.

13. Blocked polyurethane prepolymers according to claim 5, wherein the component c) are hydrocarbon resins containing phenolic OH groups and with an hydroxyl group content of 0.1 wt.% to 10 wt.%.